

92332

S/189/61/000/003/002/002

D224/D302

**Fluorometric determination...**

Vysshay shkoly, Khimiya i khimicheskaya tekhnologiya, 2, 285, 1958) have already indicated, a zirconium quercetinate solution gives a strong orange-yellow fluorescence on exposure to ultraviolet light which masks any fluorescence due to titanium quercetinate, so it is essential to use both chromatographic and fluorometric techniques in order to obtain the desired result. The first step consisted of the development of a chromatographic procedure: the pipetting of aliquots of zirconium solution onto Whatman No. 1 paper, followed by the spraying of the spots with a quercetin-ethyl alcohol solution and then by their drying and subsequent identification under a Pk-2 ultraviolet lamp. Next, a study was made of the behavior of Zr, Ti, Th, Fe<sup>3+</sup>, Al and Be on paper with various solvents--mixtures of hydrochloric acid and ethyl alcohol, isopropyl alcohol and methyl-ethyl-ketone-- the resulting chromatograms being examined afterwards in visible and ultraviolet light. The data showed that it is possible to differentiate between Zr, Ti, Fe and Be on one chromatogram, and, therefore, to determine zirconium in the presence of titanium and iron; a 4 : 1 mixture of ethyl alcohol and

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S/189/61/000/003/002/002

D224/D302

**Fluorometric determination...**

hydrochloric acid appears to be the most suitable solvent. In the last stage this solvent is used to effect a preliminary 8-hour separation of the above elements on chromatographic paper. After spraying with 0·01% quercetin solution the intensities of fluorescence of the spots under ultraviolet light were compared with those of standards containing known amounts of zirconium (0·12 - 15 $\gamma$ ); the experimental error was  $\pm 0\cdot2 - 0\cdot4\%$ . The finalized technique was subsequently tested by using it to determine zirconium in titanium-iron ore which had been previously analyzed gravimetrically; the sample was prepared for analysis by dissolving a small quantity in hydrofluoric and sulfuric acids (Ref. 3: Analiz mineral'nogo syr'ya (Analysis of Mineral Products) Goskhimizdat, Leningrad, 1956). The ZrO<sub>2</sub> content of the ore as found by the fluorometric-chromatographic procedure is 6·2% as compared with a figure of 6·7% obtained by the gravimetric technique. On the basis of this relatively close agreement the authors thus conclude that their method gives completely reliable results. There are 3 tables and 3 Soviet-bloc references.

X

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X

Fluorometric determination...

S/189/61/000/003/002/002  
D224/D302

ASSOCIATION: Knfedra analiticheskoy khimii (Department of Analytical Chemistry)

SUBMITTED: March 18, 1960

Card 4/4

ALIMARIN, I. P.; GOLOVINA, A. P.; TENYAKOVA, L. A.

Determination of zirconium in titanium and iron-containing  
ores with quercetin. Metod. anal. khim.-reak. i prepar. no.  
4:128-130 '62. (MIRA 17:5)

1. Moskovskiy gosudarstvennyy universitet.

GOLOVINA, A. P.; MARTIROSOV, A. Ye.

Preparation of new hydroxyflavone dyes and their analytical properties. Vest. Mosk. un. Ser. 2: Khim. 16 [i.e. 17], no. 6: 64-65 M.-D '62. (MIRA 16:1)

1. Kafedra analiticheskoy khimii Moskovskogo universiteta.

(Flavone) (Chemistry, Analytical)

GOLOVINA, A.P.; TIPTSOVA, V.G.

Photometric determination of thallium with quercetin. Zhur.-  
anal.khim. 17 no.4:524-525 Jl '62. (MIRA 15:8)

1. M.V.Lomonosov Moscow State University.  
(Thallium—Analysis) (Quercetin)

S/075/62/017/005/004/007  
1033/1233

AUTHORS: Golovina, A.P., Alimarin, I.P., Bozhevol'nov, Ye. A.  
and Agasyan, L.B.

TITLE: Datiscine - a new fluorimetric reagent for zirconium

PERIODICAL: Zhurnal analiticheskoy khimii, v.17, no. 5, 1962,  
591-594

TEXT: Datiscine (3,5,7,2' - tetraoxyflavone glucoside) produces with a number of cations soluble compounds which fluoresce upon irradiation with ultraviolet rays. In the case of Zr maximal fluorescence is observed in a 6 N HCl medium at 520 nm upon irradiation at 388 m $\mu$ . A 100 fold excess of reagent is permissible. Intensity of fluorescence reaches a constant value

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S/075/62/u17/u05/u04/u07  
I033/I233

Datiscine - a new ....

after 15-20 min. It decreases with increase of ethanol concentration. Intensity is proportional to Zr concentration in the range of 0.005 - 3 ml. This makes datiscine a most sensitive reagent for Zr. In the 1.5 - 6 N HCl acidity range there is no interference from any amount of Mg and Zn, 100,000-fold excess of Al and 100-fold excesses of Ag, Cd, Mn(II), Cu(II), Pb, Hg(II), Be, Co(II), In, Cr(III), Fe(II), Ta(V), V(V), Ni(II), Nb(V), W(VI), Y, U(VI), Ce(III), and La. In 6 N HCl, 10-fold excesses of Fe(III), Mo(VI), Ti(VI), Sb(V), Th and Ga do not interfere. This method was used for determination of Zr in aluminum and magnesium alloys. There are 2 figures and 4 tables.

Card 2/3

8/075/62/017/005/004/007  
1053/1233

Datiscine - a new...

ASSOCIATION: Moskovskiy gosudarstvenny universitet im. N.V. Lomonosova i Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistiykh khimicheskikh veshchestv (Moscow State University im N.V. Lomonosov and All-Union Scientific Research Institute of Chemical Reagents and High-Purity Chemical Substances) Moscow

SUBMITTED: June 28, 1961

Card 3/3

ALIMARIN, I.P.; GOLOVINA, A.P.; MEZHUTIN, Yu. M.

Spectrophotometric study of the reaction of thorium with  
datisceatin. Vest. Mosk. un. Ser. 2: Khim., 18 no.3:66-69  
My-Je '63. (MIRA 16:6)

1. Kafedra analiticheskoy khimii Moskovskogo universiteta.  
(Thorium compounds) (Datisceatin)  
(Spectrophotometry)

GOLOVINA, A. P.

The Second All-Union Conference on the Preparation and Analysis of High-Purity Elements, held on 24-28 December 1963 at Gorky State University im. N. I. Lobachevskiy, was sponsored by the Institute of Chemistry of the Gorky State University, the Physicochemical and Technological Department for Inorganic Materials of the Academy of Sciences USSR, and the Gorky Section of the All-Union Chemical Society im. D. I. Mendeleyev. Some 90 papers were presented, among them the following:

I. P. Alimarin, I. M. Gibalo, A. P. Golovina, and Yu. A. Mittsel'. Determination of Ta in high-purity silicon (up to 0.05 micrograms of Ta<sub>2</sub>O<sub>5</sub> in 2 g SiO<sub>2</sub>) by an extraction-luminescence method.

(Zhur. Anal. Khim., 19, No. 6, 1964, p. 777-79)

ACCESSION NR: AF4040667

S/0075/64/019/006/0693/0696

AUTHORS: Glovadskiy, Ya.; Golovina, A. P.; Levshin, L. V.; Mittsel', Yu. A.

TITLE: Rhodamine 3B as a fluorescent reagent for indium

SOURCE: Zhurnal analiticheskoy khimii, v. 19, no. 6, 1964,  
693-696

TOPIC TAGS: indium determination fluorescence analysis, rhodamine dye, rhodamine 3B, fluorescent reagent, germanium tetrachloride analysis

ABSTRACT: Rhodamine 3B was selected as the least known of the rhodamine dyes and the most promising fluorescent reagent for indium. It has been shown that the fluorescence of benzene extracts of rhodamine bromoindates can be excited by a visible light with a wave length near the maximum absorption of their solutions. The optimum concentrations of acid, potassium bromide, and reagent were determined. Indium can be determined in the presence of 2000—3000 times its amount of germanium, i.e., in germanium tetrachloride or in the presence of 10—20 times its amount of 10 other metals.  
Cord 172

• ACCESSION NR: AP4040667

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosov' (Moscow State University)

SUBMITTED: 04Jul63 DATE ACQ: 06Jul64 ENCL: 00

SUB CODES: 00 NO KEP Sovt: 009 OTHER: 000

Card 2/2

20(3.4) FILE 1 TWO REPORTS 807/2103

Leningrad. Politekhnichesky Institut imeni M.I. Kalitina  
Bulvar. no. 1901 Technologicheskaya Gidromekhanika (Industrial Hydromechanics)  
Institute, Leningrad, Russia, 1950. 220 p. (Russian engl. translat.)

Sum. Mr. V.F. Shchepetilnikov, Doctor of Technical Sciences, Professor  
of Civil Engineering, Department of Physics and Applied Mathematics,  
Mechanical Engineering, Faculty of Civil Engineering, Leningrad Polytechnic Institute.  
Editor: V.I. Petkov, Candidate of Technical Sciences, Associate Professor.  
The present issue is intended for scientific workers in the field  
of machine construction.

This collection of articles contains two groups of  
articles, namely, those dealing with the field of theoretical and applied hydrodynamics  
(boundary layer theory, hydrodynamic lubrication of the air  
and oil film, hydrodynamic characteristics of rolling elements), by authors of the Leningrad  
Polytechnic Institute, and the department of theoretical mechanics,  
of hydrodynamics and the department of theoretical mechanics,  
of hydrodynamics and the department of theoretical mechanics.  
This collection is divided into four parts. The first part contains  
the results of a laboratory study on model experiments on a hydrodynamic  
boundary layer and the friction characteristics. The second  
part contains articles on the theory of boundary and turbulent  
flow in a viscous fluid. The article treats the hydrodynamic  
theory of friction in bearings and rotors, boundary layer  
theory, the initial part of a pipe in the presence of various  
obstacles, the motion of air under the action of a rotating cylinder,  
etc. The third part belongs to the field of applied  
mechanics. One of the articles is a theoretical and experimen-  
tal study of flow around the parts of a nuclear reactor. This  
article contains the results of experimental data, some of  
which are new. The fourth part of the book contains the results  
of laboratory experiments on establishing new methods of deter-  
mining boundary conditions (relation between the resistance of a  
streamlined body, pressure distribution in nonstationary flow),  
reference literature, individual articles.

Section 1.1. Experimental Study of a Three-Dimensional  
Boundary Layer in the Contact Area of Two Plates 131  
1. Method of the experiments 131  
2. Distribution of pressure in the contact area of a  
cylinder of revolution and a wing 133  
3. The interaction of the boundary layers of a wing and  
a cylinder of revolution 135  
4. Conclusion 136

Section 1.2. On the Separation of a Plane Turbulent Jet Along  
a Solid Wall 138  
1. Stating the problem 138  
2. Selection of standard profiles of velocities and friction 139  
3. Selection of the parameters of the profiles of  
velocity and friction 140  
4. Comparison of theory with the experiment 142

GOLOVINA, A.Y.

Experimental investigation of a three-dimensional boundary layer at  
the surface junction of two bodies. Trudy LPI no.198:141-150 '58.  
(MIRA 12:12)

(Boundary layer)

VORONICH, N.V.; GOLOVINA, A.Ye.

Using the SP-2 phenol-formaldehyde resin in making organic  
plaster board. Stroimmat. 5 no.3:26-27 Mr '59.  
(MIRA 12:5)

1. Glavnyy inzhener Moskovskogo zavoda organicheskoy sukhoy  
shtukaturki (for Voronivh). Nachal'nik laboratorii Moskovskogo  
zavoda organicheskoy sukhoy shtukaturki (for Golovina).  
(Plaster board) (Gums and resins, Synthetic)

AKULOVA, L.G.; GOLOVINA, A.Ya.

Updraught in cooling towers caused by wind. Trudy 1M no.2481  
115-120 '65. (MERA 18-9)

GOLOVINA, D.P.; DANILEVSKAYA, V.I.

Bibliography on the control systems of complex operations.  
Vych. sist. no.11:135-142 '64 (MIRA 18:1)

PITIN, R.N., kand. tekhn. nauk: GOLOVINA, G.S.

Electroosmotic properties of Moscow Basin lignite. Pedzem. gaz.  
ugl. no. 4:15-19 '58. (MIRA 11:12)

1. Institut goryuchikh iskopayemykh im. G.M. Krzhizhanovskogo  
AN SSSR.  
(Moscow Basin--Lignite) (Electroosmosis)

ZINOV'EV, R.N. & GOL'KOVINA, G.S.

Some results of the investigation of electroosmosis in Moscow brown  
coal. Trudy IOI 13:52-60 '60. (MIRA 14:5)  
(Coal) (Electroosmosis)

REF ID: A21036-58	REF ID: A21036-58	REF ID: A21036-58	REF ID: A21036-58
ARC REF: 67600/58	ARC REF: 67600/58	ARC REF: 67600/58	ARC REF: 67600/58
(AM)		(AM)	
SOURCE CODE: UR/0000/65/000/000/0120/0125			
A. I. M. GOLYAEV, G. S. KARABEZHIN, D. V. (Doctor of technical sciences, Professor), D. V. (Candidate of technical sciences, Associate professor) (Soviet)			
ORIGIN: none	ORIGIN: none	ORIGIN: none	ORIGIN: none
TITLE: The effect of combustion conditions on electrical conductivity in a flame			
SOURCE: VNIIFTRI Institute of Machine Building, Novyye metody zhiganiya topliv i vypusknye protsessy. Combustion methods and problems in the output of products. Naukova Dumka, Kiev, 1985, 120-125.			
TOPIC: Flame, Flame temperature, combustion temperature, conduction, electron, electrical conductivity, radiation.			
ABSTRACT: The effect of the flame temperature and the rate of gas flow on electrical conductivity in methanol-air mixtures was investigated. The experimental setup is shown in Figure 1. The dependence of the conductivity of the flame falls with increasing of 0.6-1.0 x 10 <sup>-10</sup> ohm cm <sup>-1</sup> .			
Comments: /3			

D-21516-66

ACC NR: MT60045683

and distribution of electrical conductivity in the flame determined by the flow rate of the combustible gas mixture. An increase in the flow rate of the combustible gas mixture results in a current maximum at the center of the flame. While the reverse is true for a decrease in the flow rate. The dependence of the distribution of the electric current along the flame upon a is shown in figure 27. The dependence of the electric current along various axes upon the position of the flame at the center of the flame is also shown.

BPC Model 15 pictures

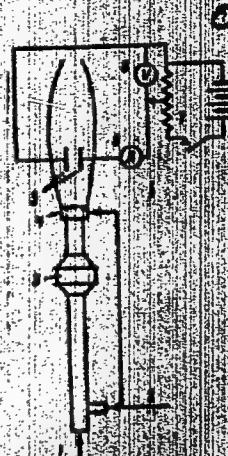


Fig. 27. Dependence of the electric current along the flame upon a. 1-gas inlet; 2-valve; 3-mixer; 4-flame lifter; 5-probe; 6-resistor; 7-voltmeter; 8-microammeter.

C-11-2/8

L21816-66

ACQ. NR.: AT600-568

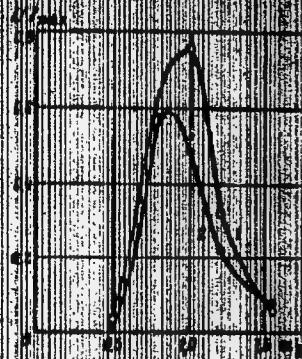


Fig. 2. The dependence of the magnitude of the maximum electrical current ( $I_{\max}$ ) from the air excess coefficient  $\alpha$  for various gas mixture flow rates  $v$ :  
1— $v = 4.85 \text{ m/sec}$ ; 2— $v = 2.98 \text{ m/sec}$ .

SUB CODE: 21.07/

SEND DATE: 0950063/

ORIG REF: 003/

OTM REF: 002

card 3/3 next

GUBANOV, A.G., doktor med. nauk; GOLOVINA, G.T., red.

[Alloplasty; methodology for the implantation of material]  
Alloplastika; metodika vzhivleniya materiala. Kiev: Zdorov'ya, 1965. 212 p.  
(MIRA 18:7)

S/020/63/148/005/020/029  
B190/B102

AUTHORS: Kolotyrkin, Ya. M., Golovina, G. V., Florianovich, G. M.

TITLE: Depassivating action of halide ions on alloys based on iron

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 5, 1963,  
1106-1109

TEXT: In order to obtain reliable data on the pitting effect arising on Fe-Cr and Fe-Cr-Ni alloys in electrolyte solutions to which halide ions were added, all factors were investigated that affect the transition ability of these alloys from a passive into an active state due to the presence of halide ions. This ability is characterized by the activation potential  $\psi_a$  measured from either the anodic polarization curves or the variation of potential with time for constant anodic current. In the latter case  $\psi_a$  depends on the current density according to the Tafel law.  $\psi_a$  was also measured in dependence on the pH at constant halide ion concentration and on the latter at constant pH, and finally on the Cr

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Depassivating action of halide ions ...

S/020/63/148/005/020/029  
B190/B102

and Ni contents in the alloy. These measurements were made mainly the steel of type 1X13 (1Kh13) in sulfuric acid solutions. When  $\eta_a$  is plotted versus  $C_{SO_4^{2-}}/C_{Hal^-}$  with constant  $C_{Hal^-} = 0.01$ , it may be seen that  $\eta_a$  increases exponentially with increasing  $SO_4^{2-}$  concentration for both  $Cl^-$  and  $Br^-$  ions. The remaining results are to be seen from the figures. There are 4 figures.

ASSOCIATION: Fiziko-khimicheskiy institut im. L.Ya. Karpova (Physico-chemical Institute imeni L.Ya. Karpov)

PRESENTED: October 16, 1962, by V.A. Kargin, Academician

SUBMITTED: October 12, 1962

Card 2/3

## Depassivating action of halide ions ...

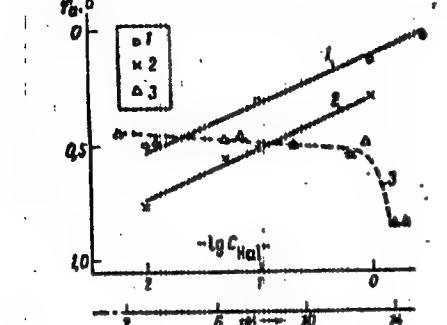


Fig. 2.  $\gamma_a$  of 1Kh13 steel as a function of the  $\text{Cl}^-$  (1) and the  $\text{Br}^-$  (2) concentrations at pH=2 and of the pH in a 0.1 N bromide solution (3).

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S/020/63/148/005/020/029

B190/B102

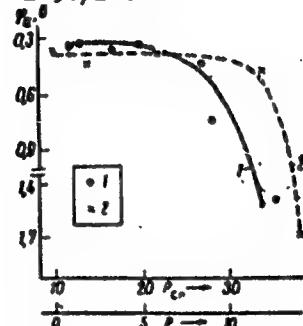


Fig. 4.  $\gamma_a$  of Fe-Cr alloy as a function of the chromium concentration (1) and of the nickel added to the alloy X22T (Kh22T) (2) in 0.1 N chloride solution of pH 2.

GOLOVINA, I.D.

Case of sympathoblastoma of the liquefacent cyst type. Vop. neirokhir.  
19 no.1:56-57 Ja-F '55. (MLRA 8:2)

1. Iz gosпитal'noy khirurgicheskoy kliniki II Moskovskogo meditsinskogo instituta imeni I.V.Stalina.  
(SYMPATHICOBLASTOMA,  
pancreas, inoperable)  
(PANCREAS, neoplasms,  
sympathicoblastoma, inoperable)

GOLOVINA, I. F.; MALOV, N. N.

The theory of geysers. Izv. AN SSSR. Ser. geofiz. no.7:  
922-929 Jl '60. (MIRA 13:7)

1. Moskovskiy gosudarstvennyy pedagogicheskiy institut imeni  
V. I. Lenina i Moskovskiy filial geograficheskogo obshchestva.  
(Geysers)

MINKIN, Ye.V., aspirant; SHESTAKOV, I.S., doktor tekhn. nauk, prof.;  
GLOVINA, G.S., inzh.

Effect of the preliminary treatment of collagen on its dessolving.  
Report No.4. Nauch. trudy NTIIP no.27:48-53 '63.

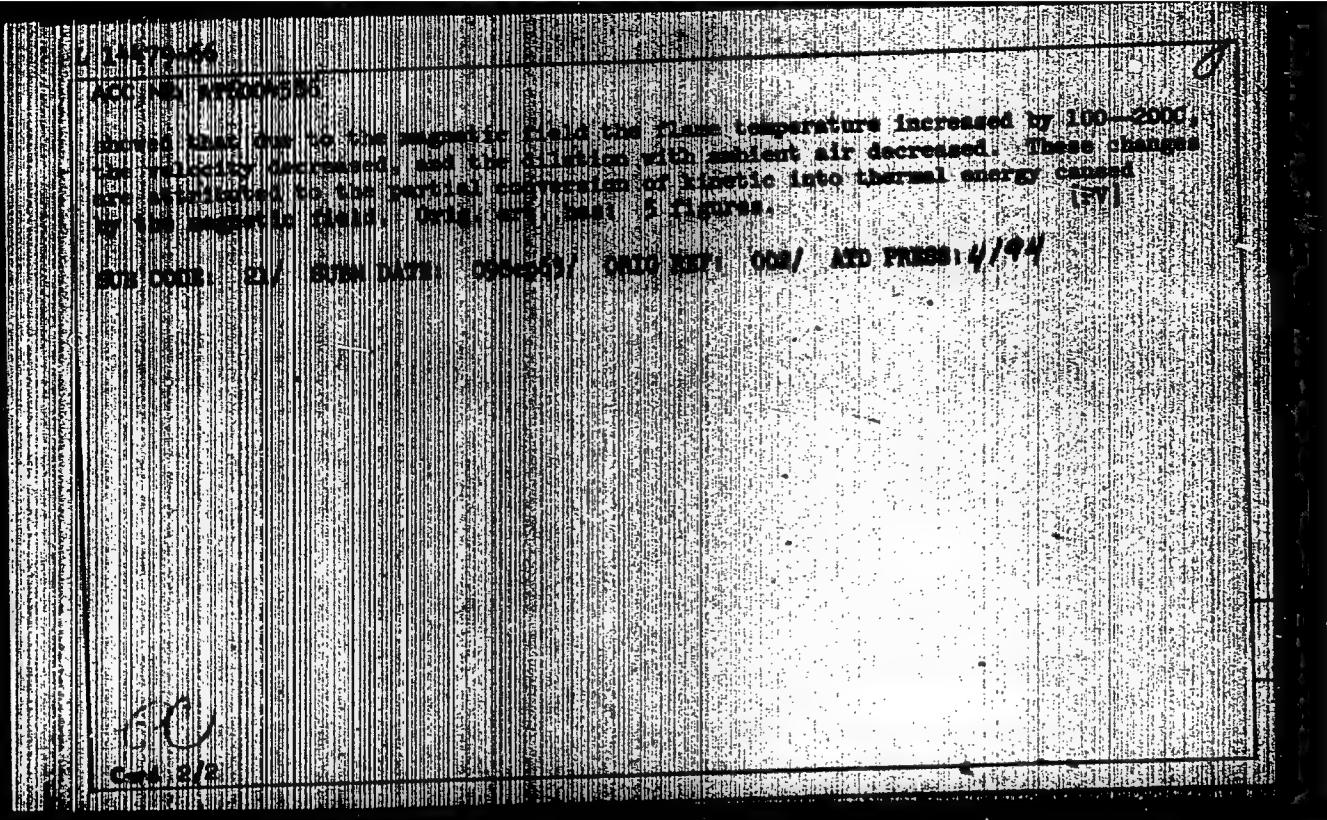
(MIRA 17:11)

1. Kafedra tekhnologii kozhi i mekha Naukovogo tekhnologicheskogo  
instituta legkoy promyshlennosti.

CHIEF	1966	1966
NAME:	Doctor of technical sciences, I. V. Ponomaryov	Doctor of technical sciences, I. V. Ponomaryov
SURNAME:	Study on the effect of a magnetic field on a stream of burning fuel	Study on the effect of a magnetic field on a stream of burning fuel
POSITION:	IN. SCIENTIST	IN. SCIENTIST
RESULTS:	Novyye metody zahranichya problemy v sostoyanii i reshenii v sovremennoi nauchno-tekhnicheskoi literatury. Issledovaniya v oblasti upravleniya v plazme. Novyye metody zahranichya problemy v sostoyanii i reshenii v sovremennoi nauchno-tekhnicheskoi literatury. Issledovaniya v oblasti upravleniya v plazme. Izd-vo Nauka, 1965, 106-111.	Novyye metody zahranichya problemy v sostoyanii i reshenii v sovremennoi nauchno-tekhnicheskoi literatury. Issledovaniya v oblasti upravleniya v plazme. Izd-vo Nauka, 1965, 106-111.
RESULTS:	Novyye metody zahranichya problemy v sostoyanii i reshenii v sovremennoi nauchno-tekhnicheskoi literatury. Issledovaniya v oblasti upravleniya v plazme. Izd-vo Nauka, 1965, 106-111.	Novyye metody zahranichya problemy v sostoyanii i reshenii v sovremennoi nauchno-tekhnicheskoi literatury. Issledovaniya v oblasti upravleniya v plazme. Izd-vo Nauka, 1965, 106-111.
RESULTS:	Novyye metody zahranichya problemy v sostoyanii i reshenii v sovremennoi nauchno-tekhnicheskoi literatury. Issledovaniya v oblasti upravleniya v plazme. Izd-vo Nauka, 1965, 106-111.	Novyye metody zahranichya problemy v sostoyanii i reshenii v sovremennoi nauchno-tekhnicheskoi literatury. Issledovaniya v oblasti upravleniya v plazme. Izd-vo Nauka, 1965, 106-111.
ABSTRACT:	It is shown that the shape of a flame can be substantially changed by the application of a magnetic field. The intensity combustion processes in the flame can also be increased by the application of a magnetic field. The results of experiments on the effect of a magnetic field on the propagation of a flame through a combustion chamber through a 19.5 x 9.4 mm opening into a 120 mm long tube are presented. The magnetic field of induction of 16 kgs in the 10-mm-wide annular gap between the electrodes was applied. The velocity of the gas jet was close to sonic. The temperature, concentration, and the shape of the flame were measured along the axis of the passage in the presence of the magnetic field. The results	It is shown that the shape of a flame can be substantially changed by the application of a magnetic field. The intensity combustion processes in the flame can also be increased by the application of a magnetic field. The results of experiments on the effect of a magnetic field on the propagation of a flame through a combustion chamber through a 19.5 x 9.4 mm opening into a 120 mm long tube are presented. The magnetic field of induction of 16 kgs in the 10-mm-wide annular gap between the electrodes was applied. The velocity of the gas jet was close to sonic. The temperature, concentration, and the shape of the flame were measured along the axis of the passage in the presence of the magnetic field. The results

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000515820007-3



APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000515820007-3"

KOLOTYRKIN, Ya.M.; GOLOVINA, G.V.; FLORIANOVICH, G.M.

Depassivating action of halogen ions on iron-based alloys. Dokl.  
AN SSSR 148 no.5:1106-1109 F '63. (MIRA 16:3)

1. Fiziko-khimicheskiy institut im. L.Ya.Karpova. Predstavлено  
академиком V.A.Karginym.  
(Iron alloys—Electric properties) (Halogens)  
(Passivation)

GOLOVINA, G.V.; FLORIANOVICH, G.M.; KOLOTYRKIN, Ya.M.

Causes of the inhibiting effect of halogen ions on the dissolution  
of iron and steel in sulfuric acid. Zashch. met. 2 no.1:41-45  
(MIRA 19:1)  
Jan-F '66.

I.. Nauchno-issledovatel'skiy fiziko-khimicheskiy institut imeni  
L.Ya. Karpova, Moakva. Submitted August 31, 1965.

GOLOVINA, X. [ ]

Possibilities for developing bee culture in Maritime Territory.  
Nauchn i prak. op. v sel'khoz. 6 no.12:15-17 D '56. (MLRA 10:1)

1. Nachal'nik Primorskoy krayevoy kontory pchelovodstva.  
(Maritime Territory--Bee culture)

GOLOVINA K. I.

Q-6

USSR/Farm Animals. Honey Bee

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 35780

Author : Golovina K.I.

Inst : Not Given

Title : Apiculture in the Soviet Far East (Pecholovedstvo Dal'nego Vostoka)

Orig Pub : Pecholovedstvo, 1957, No 9, 5-10

Abstract : The honey bees were brought to the Soviet Far East about 80 years ago from the Ukraine and Kuban'; here, they acquired new characteristics, namely endurance, peaceful disposition, ability to collect a very great amount of nectar (up to 28-33 kg. a day) and resistance to the foul brood disease. In the Miritimo and Khabarovsk regions, there are over 318,000 colonies; an experimental station of apiculture is also in operation.

Card : 1/1

50

GOLOVINA, K.N.

Coating of television receiver enclosures by the method of hot application. Lakokras.mat. i ikh prim. no.1:81-82 '60.

(MIRA 14:4)

1. Moskovskiy televizornyy zavod.

(Lacquer and lacquering)

MAKSIMOWA, V.G.; DIVERSHTEYN, P.A.; YELISEYEVA, K.G.; GOLOVINA, K.N.

Using the PE-220 polyester lacquer for finishing wooden articles.  
Lakokras.mat. i ikh prim. no.4:48-50 '62. (MIRA 16:11)

GOLOVIN, K. S.

"Biological Basis of Methods of Topping Apple Seedlings in the Nursery." Cand Agr  
Sci, North Ossetia Agricultural Inst, Min Higher Education USSR, Ordzhonikidze, 1954.  
(KL, No 14, Apr 55)

SO: Sum. No. 701, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended  
at USSR Higher Educational Institutions (16).

USSR/Human and Animal Physiology (Normal and Pathological)  
Physiology of Work and Sport

T

Abs Jour : Ref Zhur Biol., No 6, 1959, 27173  
Author : Golovina, L.A., Ivanova, M.F., Markosyan, A.A.  
Inst : Academy of Pedagogical Sciences RSFSR  
Title : Shifts in Conditioned-Reflex Activity of Young Sportsmen  
under Influence of Competition.  
Orig Pub : Izv. Akad. ped. nauk RSFSR, 1958, vyp. 93, 159-166  
Abstract : No abstract.

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GOLOVINA, L.A.

Determining the optical center of the plate of the great astrograph of the Moscow Observatory. Soob.GAISH no.104:55-60 '61.  
(MIRA 15:3)

(Telescope)  
(Astronomical photography--Equipment and supplies)

GOLOVINA, L.A.

Magnitude equation for a star due to the coma of an astrograph  
objective. Astron. zhur. 39 no.3:532-541 My-Je '62. (MIRA 15:5)

1. Maskovskiy gosudarstvennyy pedagogicheskiy institut V.I.  
Lenina.

(Stars---Magnitudes) (Aberration) (Astronomical photography)

ACCESSION NR: AP3007742

S/0033/63/040/005/0929/0943

AUTHOR: Golovina, L. A.

TITLE: Effect of atmospheric dispersion on photographic positions of stars

SOURCE: Astronomicheskiy zhurnal, v. 40, no. 5, 1963, 929-943

TOPIC TAGS: stellar image, atmospheric dispersion, dispersion, chromatic aberration, astrograph, dispersion effect, effective wavelength, solar image structure calculation

ABSTRACT: The article presents theoretical calculations for the effect of atmospheric dispersion on relative positions of stellar images of various magnitudes and spectral classes (temperatures of 3000-20,000 C), obtained with Agfa Astro plates for the chromatic curve peak on a 38-cm astrograph and a standard astrograph (Pulkovo), as well as for the focal plane of the former. The author briefly surveys the data available in the literature, particularly the ideas of Schlesinger (Astron. J. 36:169, 1926), and points out that insufficient attention has been paid to chromatic aberration. She then discusses the theory and calculations pertinent to the formation of a stellar image (see Fig. 1 in the Enclosure) and provides a comparison between displacements calculated theoretically and some experimental data (see Fig. 2 and Table 1 in the Enclosure). It

Card 1/8

ACCESSION NR: AP3007742

Is concluded that the system of effective wavelengths of star images depends on the chromatic aberration of the astrograph. Orig. art. has: 9 tables, 11 graphs and 6 formulas.

ASSOCIATION: Moscowgosudarstvennyy pedagogichesklyy institut im. V. I. Lenin (Moscow State Teachers Institute)

SUBMITTED: 28Feb63

DATE ACQ: 22Oct63

ENCL: 03

SUB CODE: AS

NO REF Sov: 006

OTHER: 008

Card: 2/5

GOLOVIN, A.M., GOLOVINA, L.A.

Clinical observations of the effect of daily oral administration of Schisandra preparation on the improvement of the visual function of the eye. Mat. klinich. chery. I drug. lek, rare. SSSR. Vest. nov. 201-205 1-2.

1. Glaznaya i odonosch'ye Ulyanovskoy oblastnoy otdelenii glazny.

GOLOVINA, I. A.

Investigating chromatic aberration of the objective of the  
J8 spectrograph at the Moscow Observatory. Spec. GAIKH no. 1348  
45-48-16a.  
(MIRKA 17-8)

GOLOVINIK, L.I. (Sofija Ivanovna)

SUBJECT USSR/MATHEMATICS/Geometry      CARD 1/1      PG - 704  
AUTHOR GOLOVINIJA L.I., JAGLOM I.M.  
TITLE The induction in the geometry. (Popular Lectures on Mathematics  
No. 21).  
PERIODICAL Moscow: State publication for technical-theoretical literature  
100 p. (1956)  
reviewed 4/1957

This book has been written for the higher classes of schools and for educational high-schools. It joins the book of Sominskij "The methods of mathematical induction". In the present book at first the method of the complete induction is introduced and then the application of the method in several domains of the elementary geometry is represented (geometric locus, definitions, Euler's theorem, the problems of map colouring, induction with respect to the number of dimensions and other problems). 40 examples are elaborated completely and 37 problems are given with instructions. The contents of the present book had been the contents of two lectures of I.M.Jaglom which had been held for the members of the Mathematical Circle which exists beside of the Moscow University.

GOLOVINA L.I.

BEDOV, V.V.D.; GOLOVINA, L.I. [translator]; GOLOVIN, O.N. [translator];  
UKKOV, A.Y., redaktor; AGRANOVICH, M.S., redaktor; KORNILOV, B.I.,  
tekhnicheskij redaktor.

[Methods of algebraic geometry] Metody algebraicheskoi geometrii.  
Moskva, Izd-vo inostrannoi lit-ry. Vol. 1. 1954. 461 p.(MLR 7:11)  
(Geometry, Algebraic)

GOLOVINA, Lidiya Ivanovna; YAGLOM, Isaak Moiseyevich; POLOVINKIN, S.M.,  
red.; AKHIEZOV, S.N., tekhn. red.

[Induction in geometry] Induktsiya v geometrii. 1zd.2., isp.  
Moskva, Gos.izd-vo fiziko-matem. lit-ry, 1961. 98 p.  
(MIRA 15:3)

(Induction (Mathematics)) (Geometry)

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000515820007-3

FIKERTEGOL'TS, Grigoriy Mikhaylovich; GOLOVINA, L.I., red.

[Fundamentals of mathematical analysis] Osnovy matematicheskogo analiza. Vol.2. 1964. 463 p. (MIR 18:9)

APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000515820007-3"

ACC NR: AP7004769

SOURCE CODE: UR/0413/67/000/001/0084/0085

INVENTOR: Agadzhanyan, S.G.; Golovin, V.V.; Golovina, L.I.; Malyarov, G.F.

ORG: none

TITLE: Pneumatic trigger with separate inputs. Class 42, No. 190057

SOURCE: Izobreteniya, promyshlennyye obratnye, tovarnyye znaki, no. 1, 1967, 84-85

TOPIC TAGS: pneumatic control, trigger circuit

## ABSTRACT:

An Author Certificate has been issued for a pneumatic trigger with separate inputs (see Fig. 1). To reduce dimensions and to increase speed of response, a spring-tensioned diaphragm with a rigidly fastened flapper forms

Card: 1/2

UDC: 681.142.07-525:621.374.3

ACC NR: APT004769

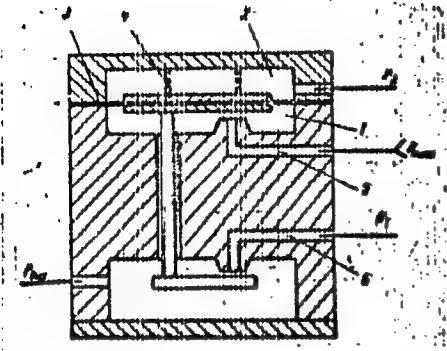


Fig. 1. Pneumatic trigger

1, 2 - Chambers; 3 - diaphragm;  
4 - spring; 5, 6 - nozzles.

two chambers. Two nozzles (feed pressure nozzle and memory pressure nozzle) and a vent which triggers output are located in one chamber, and the other is connected to the pressure control. Orig. art has: 1 figure [WP]

SUB CODE: 13,09 / SUBM DATE: 02 Nov 65 / ATD PRESS: 5115

Card 2/2

GOLOVINA, L. L.

"A Test Study of the Analytical Synthesizing Activity of the Cerebral Cortex From the Age Aspect." Cand Biol Sci, Moscow State Pedagogical Inst, Moscow, 1953. (RZhBiol, No 6, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SG: Sum. No. 521, 2. Viss. 55

SMIRNOV, K.N.; BAKULIN, S.A.; GOLOVINA, L.L.; ZAK, E.Ya.; KOGAN, S.D.

Effect of competitive athletics on gas exchange, pulse rate, arterial pressure and work capacity in humans. *Fisiol.shur.* 45 no.3:289-294  
'59. (MIRA 12:11)

1. From the Postgraduate Medical Institute, Leningrad, and the Central Institute of Physical Culture, Moscow.

(ATHLETICS,

blood pressure, pulse rate, resp. & work capacity  
in athletes (Rns))

(BLOOD PRESSURE,

in athletes (Rns ))

(RESPIRATION,

same)

(WORKING,

capacity in athletes (Rns))

(PULSE,

in athletes (Rns))

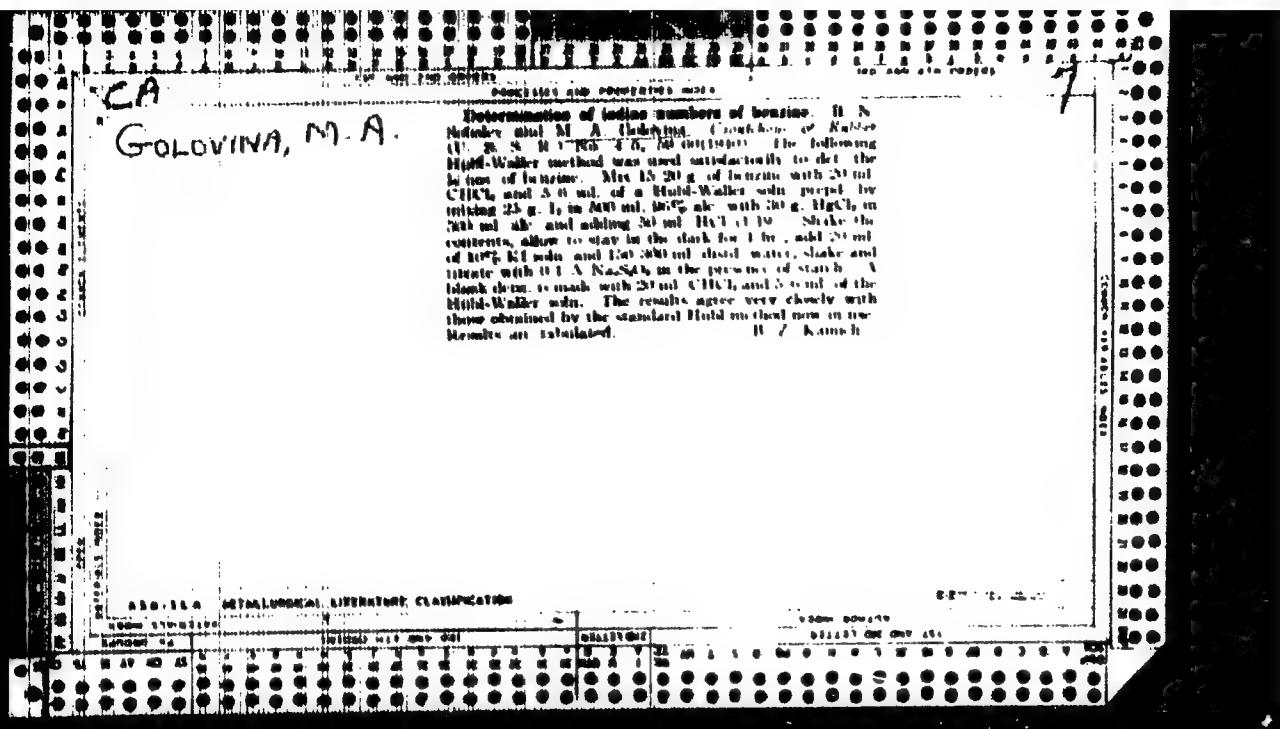
GOLOVINA, L.L.

Establishment of the ability to differentiate simple and complex stimuli in 10-12 year old children. Uch. zap. MGPI no.168:23-30 '62.

Establishment of temporary connections during the substitution of direct stimuli by speech stimuli and vice versa. Ibid.:31-40  
(MIRA 19:2)

GOLOVINA, L.L.; KALINOV, A.N.

Age-conditioned characteristics of the abstraction of distinctive  
features of compound stimuli. Uch. zap. MGPI no.168:41-50 '62.  
(MIRA 19:2)



FD-1535

USSR/Medicine - Medical Training

Card 1/1 : Pub 102-6/14

Author : Golovina, M. A.

Title : Experience in raising qualifications of physicians in charge of hospitals

Periodical : Sov. zdrav., 6, 29-33, Nov-Dec 1954

Abstract : Aside from the fact that physicians in charge of hospitals must first of all know the principles upon which the Soviet public health system is organized; he must be familiar with medical statistics and strive to improve his knowledge in other ways. Ivanovskaya Oblast health department has been sponsoring meetings of physicians in charge of larger hospitals within the oblast. At such meetings discussions on many pertinent subjects were conducted. The author of this article expresses the hope that publication of the oblast's experience may stimulate the interest of health departments of other oblasts (krays and republics) in calling meetings of physicians in charge of large hospitals within their territory; she hopes that this article will stimulate exchange of experiences among medical agencies of other oblasts as well as krays and republics.

Institution : (\*Chief) Tambov Oblast Health Department

GOLOVINA, M. F.

Golovina, M. F.

"The Combined Effect of Antibiotics and Ultra Short Waves on Staphylococci."  
Khar'kov Medical Inst. Khar'kov, 1955 (Dissertation for the degree of  
Candidate in Medical Science)

SO: Knishnaya letopis' No. 27, 2 July 1955

~~GOLOVINA, N.Y.~~

Culturability of tuberculosis bacilli from the organs of experimental animals immunized with BCG and tuberculosis bacilli treated with mycoxin. Vrach. delo no. 5:467-469 My '59. (MIRA 12:12)

I. Kafedra mikrobiologii (zav. - prof. S.L. Utevskaya) Khar'kovskogo meditsinskogo stomatologicheskogo instituta.  
(TUBERCULOSIS IN ANIMALS) (BCG) (ANTIBIOTICS)

GOLOVINA, N.P. (Khar'kov); TSYGANENKO, O.D. (Khar'kov)

Study of the immunohistochemical state in periodontitis according to  
the phagocyte count and the content of lysozyme in the saliva.  
Probl. stom. 6:73-78 '62. (MIRA 16:3)  
(GUMD-DISEASES) (SALIVA) (PHAGOCYTOSIS) (LYSOZYME)

41274

S/194/62/000/007/078/160  
D295/D308

AUTHOR: Golovina, N.I.

TITLE: On the possibility of obtaining a p-n junction by  
irradiating silicon with  $\alpha$  particles

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 7, 1962, abstract 7-4-81 t (Tr. Novocherk. poli-  
tekhn. in-ta. no. 118, 1961, 65 - 67)

TEXT: Conditions are indicated for obtaining a silicon junction  
with defect-electron conductivity: 1) There must be an excess of do-  
nor impurity in comparison with the acceptor impurity already pre-  
sent in the material; 2) the depth of penetration of the donor im-  
purity must ensure electric strength of the junction. By irradiat-  
ing the isotopic composition Si<sup>28</sup> (92.18 %), Si<sup>29</sup> (4.7 %), Si<sup>30</sup>  
(3.12 %) with  $\alpha$  particles, the p<sup>33</sup>, p<sup>32</sup> and p<sup>31</sup> isotopes will be  
formed. In order to carry out these reactions, it is necessary to  
calculate the  $\alpha$ -particle energy, which must exceed the potential  
barrier height B. For the Si<sup>28</sup> isotope B = 7.5 MeV. In addition,  
the energy of the  $\alpha$  particle must be sufficient to overcome the

Card 1/2

On the possibility of obtaining ...

S/194/62/000/007/078/160  
D295/D308

binding energy of a neutron in the nucleus, which is 8 MeV. It follows that the energy of the  $\alpha$  particle, which can be obtained only in a cyclotron, must be  $\sim$ 10 MeV. The author calculates the concentration of P atoms formed in Si by irradiation (for an initial acceptor concentration equal to  $10^{15} \text{ cm}^{-3}$ ). This concentration of P atoms amounts to  $10^{17} \text{ cm}^{-3}$ . It appears from a calculation of the depth of penetration of  $\alpha$  particles in Si that the alloying depth of the p-n junction formed is  $\sim 20 \mu$ . 6 references. [Abstracter's note: Complete translation.]

Card 2/2

PETROV, A.D.; SOKOLOVA, Ye.B.; SHEBANOVA, M.P.; GOLOVINA, N.I.

Addition of silicon hydrides to dimethylallylferrocenylsilane in  
the presence of H<sub>2</sub>PtCl<sub>6</sub>. Dokl. AN SSSR 152 no.5:1118-1121  
O '63. (MIRA 16:12)

1. Moskovskiy khimiko-tehnologicheskiy institut im. D.I.Mendeleyeva.  
2. Chlen-korrespondent AN SSSR (for Petrov).

GOLOVINA, N.K.; KOSHELEV, N.Y.

trilonometric method for determining the hardness of water under  
field conditions. Vopr.-med. zhur. no.10:49-52 O '55. (MLRA 9:10)  
(TRILON B) (WATER--ANALYSIS)

GOLOVINA, N.K.; MOSKALEV, N.F.

Rapid methods for determining nitrogen in fecal matter and other products containing nitrogen. Lab. delo 7 no.1:12-14 Ja '61.  
(MIRA 14:1)

1. Kafedra obshchey i voyennoy gigiyeny (nach. - prof. P.Ye. Kalmykov)  
Voyenno-meditsinskoy ordona Lenina akademii imeni S.M. Kirova.  
(NITROGEN—ANALYSIS)

GOLOVINA, N. N., inzh., starshiy nauchnyy sotrudnik

"High-Low" instrument for determining the impurity content of  
cotton and wool yarn. Tekst. prom. 21 no.10:73-76 O '61.  
(MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut trikotashnoy  
promyshlennosti.  
(Yarn--Testing)

GVOZDETSEKII, N.A., prof.; ZHUCHKOVA, V.K., dots.; ALISOV, B.P., prof.; VASIL'YEVA, I.V., dots.; VARLAMOVA, M.N., tekhnik-kartograf; DOIGOVA, L.S., dots.; ZVORYKIN, K.V., st. nauchnyy sotr.; ZEMTSOVA, A.I., assistant; IVANOVA, T.N.; LEBEDEV, N.P., st. prepodavatel'; LYUBUSHKINA, S.G.; NESMEYANOVA, G.Ya., mlad. nauchnyy sotr.; PASHKANG, K.V., st. prepod.; POLTARAU, B.V., dots.; RYCHAGOV, G.I., st. prepod.; SPIRIDONOV, A.I., dots.; SMIRNOVA, Ye.D., mlad. nauchnyy sotr.; SOLNTSEV, N.A., dots.; FEGOROVA, I.S., mlad. nauchnyy sotr.; TSESEL'CHUK, Yu.N., mlad. nauchnyy sotr.; SHOST'INA, A.A., mlad. nauchnyy sotr.; Prinimali uchastiya: BELOUSOVA, N.I.; GOLOVINA, N.N.; KALASHNIKOVA, V.I.; KOZLOVA, L.V.; KARTASHOVA, T.N.; PAN'KOVA, L.I.; URKIRHO, V.; PETROVA, K.A., red.; LOPATINA, L.I., red.; YERMAKOV, M.S., tekhn. red.

[Physiogeographical regionalization of the non-Chernozem center] Fiziko-geograficheskoe raionirovaniye nechernozemnogo tsentra. Pod red. N.A.Gvozdetskogo i V.K.Zhuchkovoi. Moskva, Izd-vo Mosk. univ., 1963. 450 p. (MIRA 16:5)  
(Physical geography)

REF ID: A650232	100	SOURCE CODE: UR/0286/65/000/022V0415/M/76
INVENTOR: [redacted]	[redacted]	6/14/55 27 B
NAME: none		
TITLE: Method of plating steel parts with cadmium. Class 48, No. 176766		
SOURCE: Byulleten' Inobreniya i Novyykh Tekhnik, no. 23, 1965, 76		
TOPIC CODE: metal plating - cadmium plating		
DESCRIPTION: The invention concerns a method of plating steel parts with cadmium in a acidic solution. To alleviate the plating in areas of low accessibility of complex-shaped parts and internal surfaces of tubes, the process is carried out in a solution containing 0.12 g/l cadmium sulfide, 1-3 g/l cadmium cyanide, and 10-15 g/l potassium hydroxide, with the steel part in contact with aluminum at a temperature of 20-100. [MD]		
SUB-CODE: 111, 111	SEARCH-DATES: [redacted]	ATT-PRESS: 61/55
Card #/A/C		UDC: 621.357.76:669.738

GOLOVINA, N.P.

Comparision of forms of *Plasmopara viticola* Berl. et D.Toni  
from different countries (Comparatio speciminum *Plasmopara*  
*viticola* Berl. et D.Toni e regionibus variis). Bot.mat.Otd.  
spor.rast. 10:138-144 Ja '55. (MLRA 8:?)  
(Downy mildew) (Grapes--Diseases and pests)

GOLOVINA, N. P., Cand of Bio Sci -- (diss) "Parasitic Hyphomycetes  
in Central Asia," Leningrad, 1959, 14 pp (All-Union Academy of  
Agricultural Sciences im Lenin; All-Union Sci Res Institute of Plant  
Protection) (KL, 2-60, 111)

GOLOVINA, N.P.

A new species of *Feronospora*. Bot.mat.Otd.spor.rast. 12:  
153-154 Ja '59.  
(Mildew)

GOLOVINA, N.P.

New species and forms of ascomycetous fungi from Central Asia  
Bot.mat.Otd.spor.rast. 12:155-157 Ja '59. (MIRA 12:12)  
(Uzbekistan--Ascomycetes)

GOLOVINA, N. P.

New species of imperfect fungi collected in Uzbekistan  
in 1954. Bot. mat. Otd. spor. rast. 13:233-240 '50  
(MIRA '13:?)  
(Uzbekistan--Deuteromycetes)

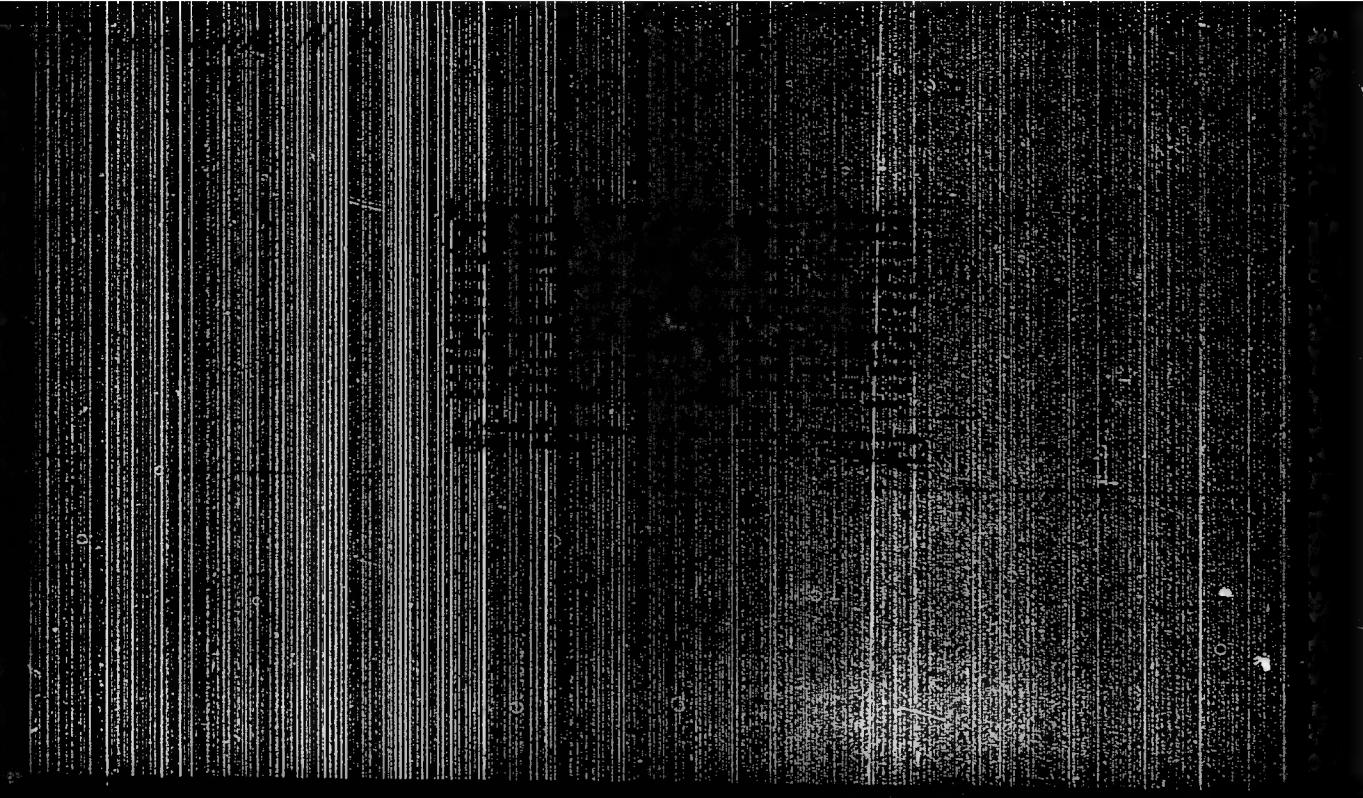
GOLOVINA, N.S., glavnyy metodist; YEVINOV, A.L., redaktor; VENKOVA, Ye.I.,  
tekhnicheskiy redaktor

[ "Central provinces" pavilion; a guidebook] Pavilion "TSentral'nye  
oblasti"; putesvoditel'. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956.  
28 p.  
(MLRA 9:9)

1. Moscow. Vsesoyuznaya sel'skokhozyaystvennaya vystavka, 1954-  
(Moscow - Agricultural exhibitions)

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000515820007-3



APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000515820007-3"

~~GOLOVINA, N.V.~~

Effect of high hydrostatic pressure on the transverse striated  
muscles in frogs. Dokl.AN SSSR 105 no.6:1378-1381 D '55.

(MIRA 9:4)

1.Predstavlene akademikom Ye.N.Pavlevskim.  
(MUSCLES)

17(1,4)  
AUTHOR:Golovina, N. V.

SOV/20-125-3-49/63

TITLE:

The Effect of a High Hydrostatic Pressure on the Isolated  
Brain of White Mouse (Deystviye vysokogo hidrostaticheskogo  
davleniya na izolirovannyj mozg beloy myshi)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 3, pp 636-638  
(USSR)

ABSTRACT:

The author points out to her earlier paper (Ref 1) in which a constant irritation in frog muscle was determined under the effect of pressure. It is the aim of the present paper to investigate the high pressure in the brain by means of vital stain. A survey of publications is given (Refs 2-13). The experimental objects were cerebral hemispheres and the mesencephalon. 100, 200, 400 and 2000 atmospheres excess pressure was at once applied to the dissected brain and staining was performed. For this purpose neutral red (0.1%) and phenol red (saturated solution) were used. Figure 1 shows the results achieved. In the case of neutral red and 100 as well as 200 atmospheres excess pressure no noticeable variation of the color was to be observed. At 400 atmospheres excess

Card 1/3

The Effect of a High Hydrostatic Pressure on the  
Isolated Brain of White Mouse

SOV/20-125-3-49/63

pressure, however, the stain of the experimental brain exceeded that of the control brain by averagely +18.7%. At 2000 atmospheres excess pressure this difference amounted to +35.3%. Phenol red yielded about the same results (differences of 22.2% and 107.7% respectively, at 400 and 200 atmospheres excess pressure respectively). These variations are neither due to an intensified formation of granulae nor the pH-variation. Apparently a real increase in the sorption properties of the nerve cells towards certain vital pigments and probably also towards several other substances are concerned here. Therefrom the conclusion may be drawn that the high hydrostatic pressure is also able to cause a state of irritation in the cortical cells of the brain. In this respect there are obviously no differences as compared to other tissues. The lowest pressure capable of producing variations in the brain cells cannot be determined from these experiments; it is only possible to speak of a beginning effect above 400 atmospheres excess

Card 2/3

The Effect of a High Hydrostatic Pressure on the  
Isolated Brain of White Mouse

SOV/20-125-3-49/63

pressure. This value holds also in the case of frog muscles.  
Further investigations are being carried out. There are  
1 figure and 13 Soviet references.

ASSOCIATION: Institut tsitologii Akademii nauk SSSR  
(Institute of Cytology of the Academy of Sciences, USSR)

PRESENTED: December 11, 1958, by Ye. N. Pavlovskiy, Academician

SUBMITTED: December 7, 1958

Card 3/3

DOLOVINA, N. V.

"Distribution of Water between the Muscle and the Medium in Solutions  
of Electrolytes." pp. 21

Institute of Cytology Laboratory of Cell Biochemistry, Laboratory of  
Cell Physiology

III Nauchnaya Konferentsiya Instituta Tsitologii AN USSR. Tesisy Dokladov  
(Second Scientific Conference of the Institute of Cytology of the Academy  
of Sciences USSR, Abstracts of Reports), Leningrad, 1962 88 pp.

JPRS 20,634

NASONOV, Dmitriy Nikolayevich; TROSHIN, A.S., glav. red.; GOLOVINA, N.V., red.; POLYANSKIY, Yu.I., red.; ROZENTAL', D.L., red.; STRELKOV, A.A., red.; VASIL'YEVA, Z.A., red.izd-va; VINOGRADOVA, N.F., tekhn. red.

[Some problems of cell morphology and physiology] Nekotorye voprosy morfologii i fiziologii kletki; izbrannye trudy. Moskva, Izd-vo AN SSSR, 1963. 361 p. (MIRA 16:12)  
(Cytology)

OOLOVINA, N.V.

Possibility of adaptation to high hydrostatic pressure in  
aquatic organisms under experimental conditions. Sbor. rab.  
Inst. tsit. no. 4106-113 '63  
(MIRA 17:3)

BERESTOV, I.P.; GOLOVINA, N.V.; PUKHAL'SKIY, I.M.

Communist labor movement in the "Smychka" Canning Plant in Rostov.  
Kona. i ov. prom. 18 no.11:3-5 N '63. (MIRA 16:12)

1. Rostovavtoma-na-Donu vysshaya partiynaya shkola (for Berestov).
2. Konserviruyy zavod "Smychka" (for Golovina). 3. Rostovskiy-na-Donu finansovo-ekonomicheskiy institut (for Pukhal'skiy).

L 39/27-66 EMP(t)/EMI(h)/EMT(s) JD/JG/GD-2  
ACC NR: AP6007175 SOURCE CODE: UR/0188/66/000/001/0081/0084

AUTHORS: Vavilov, V. S.; Golovina, N. V.; Iferov, G. A.;  
Tulinov, A. P.; Chukichev, M. V.

ORG: NIIYaF MGU

TITLE: Use of semiconductor counters of the p-i-n type to study  
nuclear reactions

SOURCE: Moscow. Universitet. Vestnik. Seriya III. Fizika,  
astronomiya, no. 1, 1966, 81-84

TOPIC TAGS: junction diode, semiconductor device, crystal counter,  
silicon, alpha particle reaction

ABSTRACT: The authors describe a procedure for preparing p-i-n  
junction counters. The procedure is based on the drift of lithium  
ions in silicon. The counters obtained in this manner were used to  
investigate nuclear reactions induced by  $\alpha$  particles accelerated to  
26 Mev at the cyclotron of NIIYaF MGU. Zone-melted silicon with  
resistivity 450 -- 800 ohm-cm was used as the initial material. Lith-

Card 1/2 UDC: 539.1.074

L39727-66

ACG NR: AP6007175

ium was deposited on its surface by vacuum sputtering and allowed to diffuse at 450 -- 500°C to a depth ~ 100 μ. The ion drift was produced in silicone oil at 120°C and an inverse voltage of 300 V. The resolving power of the counters was determined by measuring the spectrum of α particles from a Cm<sup>242</sup> source, and was found to range from 0.9 -- 1.5%. The counters were used to investigate elastic and inelastic scattering of 26.3 Mev α particles by carbon nuclei. The tests have shown that the excitation functions plotted at fixed angles exhibited as a rule sharply pronounced nonmonotonicity, probably due to the appearance of some individual levels or groups of levels in the compound nucleus. The experimental data obtained were used to construct the angular distributions at different energies of the incident particles. These were found to agree with theory at small angles and exhibited a regular tendency for an increase in the differential cross section at large angles. No agreement was observed at medium angles. The results agree with the calculations based on the adiabatic model only at small angles. The authors thank I. B. Teplov, P. Matyya, and M. A. Kozlov for help during the work. Orig. art. has: 6 figures.

SUB CODE: 20/ SUBM DATE: 19Sep64/ OTH REF: 004

Card 12 S 2/2

[Dictionary on automatic control, computer engineering, and measurement techniques in seven languages; English, Russian, French, Spanish, Italian, Dutch, and German] Semenovskiy slovar' po avtomatike, vychislitel'noi i izmeritel'noi tekhnike; anglo-russko-frantsuzko-ispansko-ital'iansko-gollandsko-nemetskiy. Moskva, Fizmatgiz, 1963. 471 p. (MIRA 17:2)

BIENSON, Mikhail Il'ich, inzh.; BEREZIN, Nikolay Tikhonovich,  
inzh.; GURNI, Varvara Pavlovna, kand. tekhn.nauk;  
LKUBOVSKIY, Grigoriy Abramovich, inzh.; MARTIROSIAN,  
Yelena Mikirtychevna; PROGOROVICH, Anna Lazarevna,  
kand. tekhn. nauk; SIMONOVA, Irina Mikhaylovna, inzh.;  
YEFREMOVA, N.I., red.; GOLOVINA, N.Z., red.; AKSEL'ROD,  
I.Sh., tekhn. red.

[English-Russian dictionary of the food industry] Anglo-  
russkiy slovar' po pishchevoi promyshlennosti. Moskva,  
Fizmatgiz, 1963. 570 p. (MIRA 17:1)

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Arenaphthalene of 2,2,4 trimethylpentane over molybdenum catalysis. A. N. Matveev and O. A. Gubanova (M. V. Lomonosov State Univ., Moscow) 27657 (Bukhnik Akademicheskii Gen. Chem.) 20, 2213-24 (1980).—Pavage of Me<sub>2</sub>CHCH<sub>2</sub>CMe<sub>2</sub>, (I), has 98.6-9.7%, d<sub>10</sub> 0.881, n<sub>D</sub><sup>20</sup> 1.3935, over a MoO<sub>3</sub>-m-Al<sub>2</sub>O<sub>3</sub> catalyst (cf. Green, C.A. 77, 4071) at 400° and 500° give the following results. At 450° and space velocity D 3, the yield of liquid catalyzate is 30-50%, with the effluent gas contg. 60% H<sub>2</sub> and 30% C<sub>2</sub>H<sub>4</sub>. The catalyst does not contain alkanes isomeric with the starting material; cyclopentane hydrocarbons were also absent. Fractionation and Raman spectra were used. Under the above conditions there are formed 9-10%  $\alpha$ - and  $\beta$ -ethylene, 2% Me<sup>2</sup>Pt, and some C<sub>6</sub>H<sub>6</sub>, C<sub>6</sub>H<sub>5</sub>, and a little *m*-xylene, as well as very small amounts of CH(CH<sub>2</sub>Me)<sub>2</sub>. The apparent activation energy of dehydrogenation of I is 26,400 cal./mole. Under the conditions used, the catalyst surface is not affected by the initial hydrocarbon. The products obtained cannot be explained by the current theories of reaction mechanism and it is suggested that the cyclization proceeds not through alkenes but through alkynes or through partly hydrogenated adsorption complexes. Thus in xylene formation the 1st step would be formation of 2,4-dimethyl-2-pentene. The possibility of analogy to cracking by a loss of Me groups is also considered in the formation of substances like MePt; probably the Pt at the quaternary C atom is lost first.  
G. M. Kosolapoff

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The aromatization of 3,3,4-trimethylpentane over molybdenum catalyst. A. V. Plate and G. A. Chikishev  
Zhur. Khim. U.S.S.R. 26, 3229-37 (1952) (Engl. translation H. T. 31.  
See C.A. 48, 7032.

MARCOLIS, L.Ya.; KLINEVOK, D.V.; GOLOVINA, O.A.

Synthesis of ethylyny labelled with carbon. Doklady Akad. Nauk S.S.R. 86,  
313-15 '52.  
(CA 47 no.22:12209 '53)

GOLOVINA, O. A.

USSR/Physical Chemistry - Kinetics, Combustion, Explosions, Topo-  
chemistry, Catalysis.

B-9

Abs Jour: Referat. Zhurnal Khimiya, No 2, 1958, 3897.

Author : O.A. Golovina, S.Z. Roginakiy, M.M. Sakharov, Ya. T. Rydus.

Inst : Academy of Sciences of USSR.

Title : Checking Dehydration-Condensation Mechanism of Hydrocarbon  
Chain Formation at Hydrocarbon Synthesis of CO and H<sub>2</sub> by  
Tagged Alcohol.

Orig Pub: Dokl. AN SSSR, 1956, 108, No 2, 253-255.

Abstract: Hydrocarbon (HC) synthesis of CO and H<sub>2</sub> was carried out on  
Co catalyst at 195° with the addition of C<sub>2</sub>H<sub>5</sub>OH tagged with  
Cl<sup>14</sup> to the initial gas mixture. The drop of specific radio-  
activity (SR) with the increase of their molecule length and  
the stability of the molecular radioactivity SR in molecules  
containing over 5 C atoms was established. The revealed mole-  
cular radioactivity SR stability indicates a chain mechanism

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USSR/Physical Chemistry - Kinetics, Combustion, Explosions, Topo-  
chemistry, Catalysis.

B-9

Abs Jour: Referat. Zhurnal Khimiya, No 2, 1958, 3897.

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515820007-3

GOLOVINA, O.A.; ROGINSKIY, S.Z.; SAKHAROV, M.M.; BYDUS, Ya.T.; DOKUKINA, Ye.S.

Junction of straight chains in the synthesis of hydrocarbons from  
CO and H<sub>2</sub>. Probl. kin. i kat. 9:76-83 '57. (MIRA 11:3)  
(Hydrocarbons) (Carbon—Isotopes)

GOLOVINA, O. A.

USSR/Physical Chemistry - Kinetics, Combustion, Explosions, Topo-  
chemistry, Catalysis.

B-9

Abs Jour: Referat. Zhurnal Khimii, No 2, 1958, 3898.

Author : O.A. Golovina, Ye. S. Dolzhina, S.Z. Roginskii, M.M. Sakharov,  
Ya. T. Rybin.

Insti : Academy of Sciences of USSR.

Title : Study of First Chain Part in Hydrocarbon Synthesis of CO and H<sub>2</sub>.

Orig Pub: Dokl. AN SSSR, 1957, 112, No 5, 864-867.

Abstract: Experiments of hydrocarbon synthesis of CO and H<sub>2</sub> were carried out at 195 °C on a catalyst of the composition 100 Co : 18 ThO<sub>2</sub> : 100 kieselguhr with addition of 0.78 or 1.45% by volume of C<sub>2</sub>H<sub>4</sub> (I) tagged with C-14 to the initial gas mixture of the composition 1CO + 2H<sub>2</sub>. It was established that the molar radioactivity ( $\lambda$ ) of the formed hydrocarbons was stable and did not depend on their molecular weight. The synthesis product yield did not practically change at the change of the tagged I concen-

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-25-

GUDEVSKA, V.N., Acad Chem Sci--(USSR) "Isotopic label on the role of flat  
carbohydrate <sup>Supernumerary</sup> ~~carbohydrates~~ monosaccharides in the exchange of carbon and hydrogen."  
Len, 1957. 8 pp, incl cover (Acad Sci USSR, Inst of Physical Chemistry),  
150 cop; loc (R, 47-5 ,130)

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5.3300

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5(4)

AUTHORS:

Golovina, O. A., Sakharov, M. M., Roginskiy, S. Z.,  
Dokukina, Ye. S.

TITLE:

Isotopic Data on the Part Played by Two-dimensional Chains in  
the Synthesis of Hydrocarbons From Carbon Monoxide and Hydrogen

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 11, pp 2451-2456  
(USSR)

ABSTRACT:

The problem of hydrocarbon chains, which completely develop on the surface of the catalyst, has not yet been solved. N. N. Semenov and V. V. Voyevodskiy (Ref 3) recently carried out investigations on this subject. A direct proof of the existence of two-dimensional chains in the synthesis of hydrocarbons was obtained by the experiments of Emmett, Kummer et al. (Ref 8), who regard the results obtained as a confirmation of the dehydration-condensation synthesis scheme according to Storch, Golambik, and Anderson (Ref 7). However, the paper mentioned in reference 8 has given no answer to many important questions. Therefore the distribution of radioactivity among the hydrocarbon synthesized from CO and H<sub>2</sub> on cobalt-thorium catalysts (100 Co : 18 ThO<sub>2</sub> : 100 kieselguhr) has been in-

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Isotopic Data on the Part Played by Two-dimensional Chains in the Synthesis  
of Hydrocarbons From Carbon Monoxide and Hydrogen

vestigated. In one series of these experiments ethylene and propylene labeled with C<sup>14</sup> were added to the initial mixture. In the other case, the catalyst was carbonized with labeled carbon monoxide. It was found that ethylene at a concentration of 4.8 vol% in the original mixture participates both in the formation reaction and in the growth reactions of the hydrocarbon chains, as has been observed by Ya. T. Bydus and N. D. Melinskiy et al (Ref 12) in the case of higher concentrations. Like ethylene, also propylene and carbon carbide are able to participate in the growth of hydrocarbon chains. It is assumed that the participation of carbon carbide depends on a previous exchange of the latter for carbon monoxide. The authors present a four-stage scheme for the formation of hydrocarbons from CO and H<sub>2</sub> on a cobalt-thorium catalyst in the case of initiation of the process by ethyl molecules. There are 3 figures and 15 references, 11 of which are Soviet.

ASSOCIATION: Akademiya nauk SSSR, Institut fizicheskoy khimii, Moskva  
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SOV/76-33-11-12/47

Isotopic Data on the Part Played by Two-dimensional Chains in the Synthesis  
of Hydrocarbons From Carbon Monoxide and Hydrogen

(Academy of Sciences, USSR, Institute of Physical Chemistry,  
Moscow)

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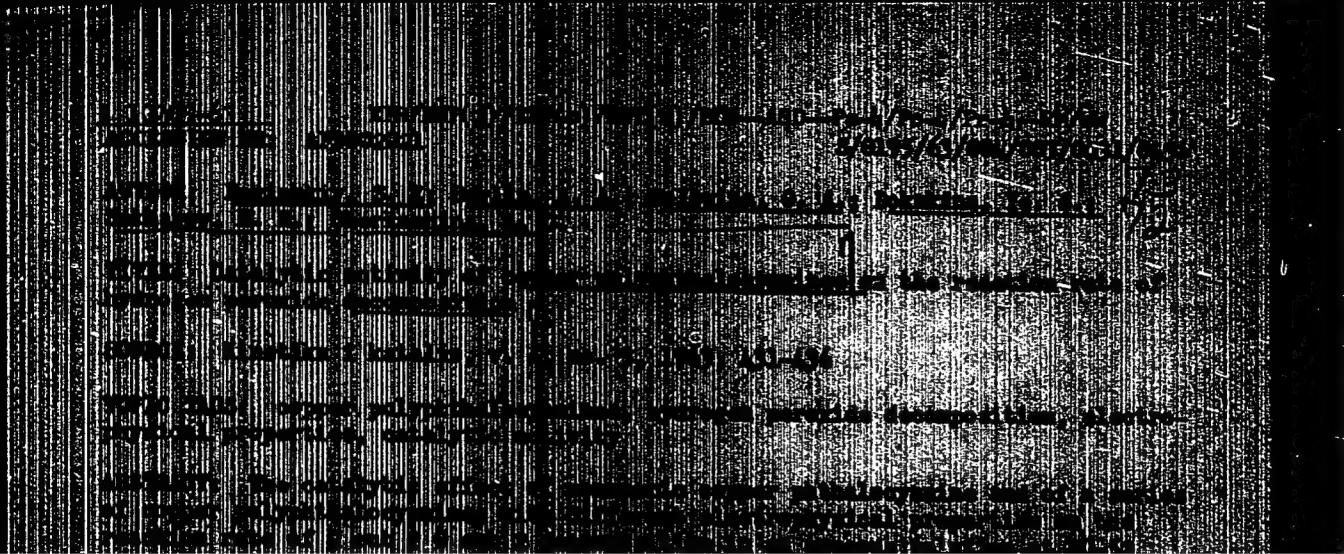
GOLOVINA, O.A.; ISAYEV, O.V.; SAKHAROV, M.M.

Radioactive tracer technique in investigating the mechanism of  
oxidation of propylene to acrolein on a cuprous oxide catalyst.  
Dokl. AN SSSR 142 no.3:619-622 Ja '62. (MIRA 15:1)

1. Institut khimicheskoy fiziki AN SSSR. Predstavлено академиком  
V.N.Kondrat'yevym.  
(Propene) (Acrolein) (Oxidation)

"APPROVED FOR RELEASE: 09/24/2001

CIA-RDP86-00513R000515820007-3



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